

CHAPTER 2

SITE SELECTION

2-1. Introduction.

The selection of a site for an unsupervised outdoor play area should be coordinated with the installation master plan. Military facility planning standards will serve as a guide for play area planning (TM 5-803-12; AFI 32-1024; MIL HDBK 1190). In addition, site selection should consider the type of play area to be provided and general site selection guidance presented in this chapter. A new site may be developed or an existing play area may be renovated.

2-2. Types of Unsupervised Play Areas.

Three types of unsupervised play areas are recommended: play lots, neighborhood parks, and community parks. Location, number of housing units served, travel distance from housing units, age of children, and space requirements determine the type of play area. Table 2-1 provides a summary of criteria guidelines for each type of play area. The recommended space requirements should be verified during planning and design based on installation population, community needs, and design criteria.

a. Play Lots. Play lots will be designed to meet the play needs of two age groups within a family housing area: ages 6 weeks to 5 years and ages 5 to 9 years. Separate play lots may be designed for each age group at different locations or one play lot may be designed to serve both age groups. A variety of play opportunities, such as sand play, dramatic play, and pathways for wheeled toys, will be provided to foster child development. Figure 2-1 illustrates the provision of play lots within a family housing area.

(1) *Location.* Because children in these age groups require close parental supervision, play lots should ideally be located within sight lines of housing and should not require the crossing of a street to reach the play area. Families should be able to walk to the play lot in 5 minutes or less.

(2) *Facility Standard.* One play lot will be provided for 30 housing units. It should accommodate 15 to 35 children. Separate play lots may be designed for each age group at different locations or one play lot may be designed to serve both age groups.

(3) *Space Requirements.* Three hundred and twenty-five square meters (3,500 square feet) will be required for each play lot.

b. Neighborhood Parks. Neighborhood parks provide play opportunities for youth ages 9 to 15 years within the family housing area. The parks include small-scale sports facilities, such as basketball hoops and grassy fields, as well as tables and seating areas. Manufactured play equipment may also be included. Figure 2-1 illustrates the location of neighborhood parks within a family housing area.

(1) *Location.* The park will be located at the edge of housing areas without requiring the crossing of a heavily traveled street to reach the play area. It will be connected to family housing by a bike path or sidewalk that is separated from vehicular traffic. It should be located within a 5- to 10-minute walking distance from housing units.

(2) *Facility Standard.* One park will be provided for 150 housing units. It should accommodate 30 to 50 youth as shown in Table 2-1.

(3) *Space Requirements.* Seven hundred square meters (7,500 square feet) will be required for neighborhood parks.

c. Community Parks. Community parks serve the entire installation (TM 5-803-12). The parks are used for family recreation and may include play areas for 6 weeks to 5 years, 5 to 9 years, and 9 to 15 years. Sports facilities, group picnic areas, nature trails, and other recreational facilities may also be provided. Users may access the park by privately owned vehicles, bicycles, or public transportation. Young children will be transported by parents, and offstreet parking may be provided. Figure 2-2 illustrates the location of community parks on an installation.

(1) *Location.* Community parks may be associated with a significant natural resource, such as a nature area, creek, lake, etc. The park will be located on a bus route if public transportation is available.

(2) *Facility Standard.* One or two community parks should be provided per installation as shown in Table 2-1. The need is determined by estimating the current and future demand for the park and reviewing facility standards (TM 5-803-12).

(3) *Space Requirements.* For community parks, 24,275 to 40,475 square meters (6 to 10 acres) of open space should be provided per 1,000 installation residents. The amount of open space allocated specifically to children's outdoor play areas within the community park should be determined during the planning process based on safety and design considerations.

Table 2-1. Criteria Guidelines for Unsupervised Play Areas.

Type of Play Area	Age Group Served			Number of Facilities Per Housing Unit	Child Capacity	Area Provided For Play Areas
	6 weeks - 5 years	5-9 years	9-15 years			
Play lot	x	x		1 per 30	15-35	325 m ² (3,500 ft. ²)
Neighborhood park		x	x	1 per 150	30-50	700 m ² (7,500 ft. ²)
Community park	x	x	x	1 - 2 per installation	*	*

* Child capacity depends on design; area should accommodate adequate use zones for manufactured play equipment.

X Suitable play area

2-3. Site Selection Guidance.

In addition to space requirements and location, several other characteristics should be evaluated when selecting sites for each type of children's play area. A site visit is required to fully evaluate site suitability, and should consider circulation and access; former land use; adjacent land uses; visibility; topography; existing utilities; drainage; microclimate; and existing vegetation.

a. *Circulation and Access.* Safe pedestrian, bicycle, and vehicular access to the play area, and access for people with disabilities will be considered in selecting locations for children's outdoor play areas.

(1) *Installation Trail System.* A trail system that is separated from traffic circulation and connects housing, community facilities, and play areas is highly desirable. This circulation system should be addressed in the installation master plan. The master plan should be evaluated to determine the location of existing or proposed trails, and to determine the potential for locating play areas near these trails.

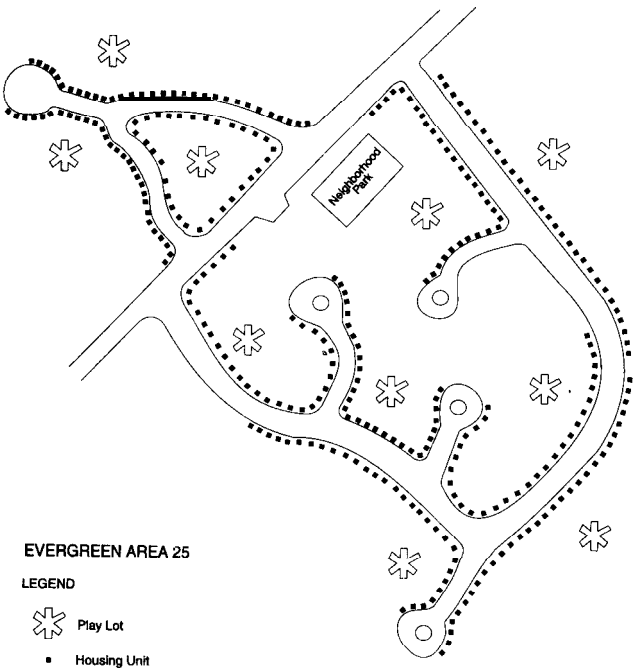


Figure 2-1. Neighborhood Parks and Play Lots

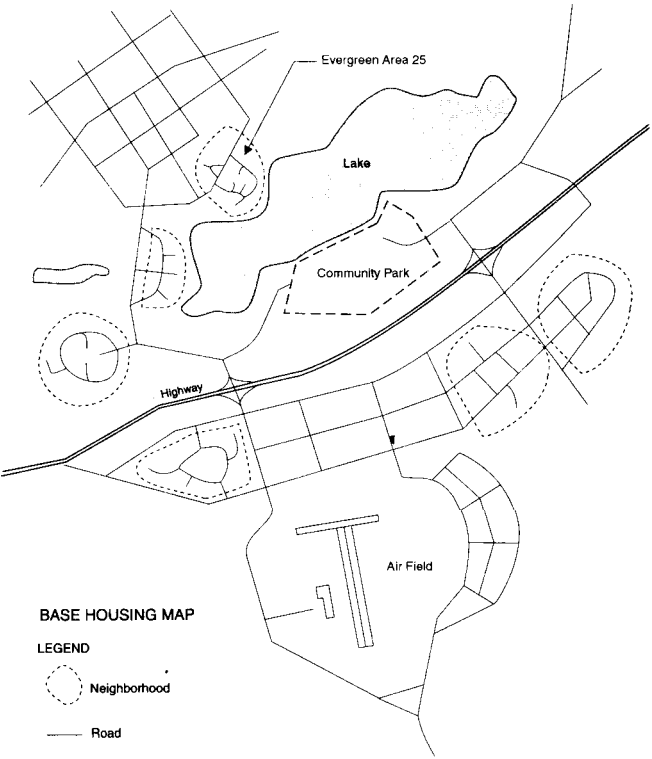


Figure 2-2. Community Park.

(2) *Service Vehicle and Emergency Access.* Access for maintenance, emergency, and service vehicles will be provided to all play areas.

b. *Former Land Use.* Sites formerly used for landfills, industrial use, or military training will not be used for play areas.

c. *Adjacent Land Uses.* When selecting sites for children's outdoor play areas, adjacent land uses will be considered.

(1) *Compatible Land Uses.* Children's outdoor play areas should be located near family housing, schools, recreation centers, community gardens, chapels, outdoor recreation areas, or open space.

(2) *Incompatible Land Uses.* Play areas will not be located near airfields, railroads, maintenance facilities, industrial areas, storage and supply areas, training and range areas, troop housing, or administrative areas. Areas near sources of loud noise, air pollution, or high traffic volume will be avoided.

d. *Visibility.* Sites that allow easy observation by adults from adjacent housing, recreation areas, streets, or other use areas should be selected.

e. *Topography.* Whenever possible, sites with a variety of topographic characteristics should be selected. Natural topographic features such as mounds and slopes increase the desirability of a site for use as a play area. Ball fields and ball courts require flat locations. Sites that require extensive site work to function as a play area should not be selected. Dangerous features, such as sudden drop-offs, topography that creates blind spots, or slopes that prohibit disabled access are cause for rejecting a site as a potential play area location.

f. *Existing Utilities.* Utilities should be analyzed to determine their location, availability, and capacity to satisfy anticipated play area needs. Sites with utilities that will support play area needs and will not expose children to hazards should be selected. Hazards include drop inlets and manhole covers.

(1) *Water.* When possible, play areas should be located near existing potable water lines. It is recommended that play areas have access to water for drinking, play activities, and maintenance. For community parks, access to water lines is also needed for restroom facilities.

(2) *Electricity.* The need for electricity should be evaluated. If night use of play areas is anticipated, access to electrical lines should be considered. However, play areas will be located away from electrical lines and transformers. An electromagnetic field specialist should be consulted to determine siting requirements.

(3) *Telephones.* For community parks, sites that allow telephone service for emergency communication should be selected.

(4) *Sanitary Sewer* For community parks, access to sanitary sewer lines is also needed for restroom facilities.

g. *Drainage.* Soil types and drainage will be considered when selecting a play area location. Wet, boggy, slow-draining soil conditions affect the location, construction, cost, and safety of play areas.

(1) *Positive Drainage.* Sites with grades that promote positive drainage should be selected. If additional drainage is required, the construction costs should be evaluated before selecting the site.

(2) *Soil Types and Drainage.* Soil type plays a major role in site drainage. Loamy-sandy soil allows water to percolate through the soil and provides good drainage. For soil with high clay content, more deliberate drainage solutions may be necessary. Table 2-2 illustrates the drainage properties of various soil types.

(3) *Storm Sewers.* The adequacy of the system and necessary improvements needed should be considered during site selection. Whenever possible, sites should be selected where storm drains may be located outside the play area. Drainage grates will never be located in play equipment use zones unless grates are covered with synthetic impact-attenuating surfacing.

h. *Microclimate.* Microclimate conditions are weather patterns unique to a site. These conditions are influenced by the site's topography, landscape, and orientation. The microclimate may increase or decrease the site's attractiveness and suitability as a play area location. Wind, sun, heat, cold, and dampness are climatic conditions that can affect a site's suitability as a play area. For example, if a site has large shade trees, high rainfall, and features that block morning sun, the specific site may

Table 2-2. Soil Types and Drainage Properties.

Division	Soil Description	Drainage
Gravel and gravelly soils	Well-graded gravel, or gravel-sand mixture, little or no fines	Excellent
	Poorly graded gravel, or gravel-sand mixtures, little or no fines	Excellent
	Silty gravels, gravel-sand-silt mixtures	Poor
	Clayey-gravels, gravel-clay-sand mixtures	Poor
Sand and sandy soils	Well-graded sands, or gravelly sands, little or no fines	Excellent
	Poorly graded sands, or gravelly sands, little or no fines	Excellent
	Silty sands, sand-silt mixtures	Fair
	Clayey sands, sand-clay mixtures	Poor
Silt and clays LL < 50	Inorganic silts, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	Poor
	Inorganic clays of low to medium plasticity, gravelly clays, silty clays, lean clays	Very Poor
	Organic silty-clays of low plasticity	Very Poor
	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	Poor
Silt and clays LL > 50	Inorganic clays of high plasticity, fat clays	Very Poor
	Organic clays of medium to high plasticity, organic silts	Very Poor
	Peat and other highly organic soils	Poor

LL - Liquid limit.

be too muddy on most days of the year for children's play. Some poor microclimate conditions may be attenuated during play area design.

i. Existing Vegetation. The presence of existing vegetation is an important selection criteria. Existing vegetation can increase the attractiveness, comfort, and play opportunities of a proposed site.

2-4. Existing Play Equipment Areas.

When evaluating a site with existing play equipment, the play areas and equipment should be in-

spected for compliance with child safety and development requirements presented in this manual. If it is necessary to relocate, remove, or replace equipment to meet child safety requirements, a design for play area renovation will be necessary. The site suitability should be reevaluated using the guidance presented in this chapter. The design process for both renovation and new construction is identical. Renovations may have more limitations and, therefore, may require more detailed and careful design.